IN THE SPECIFICATION:

Please amend the Specification as follows.

At page 1, line 31- page 2, line 6:

--In order to facilitate fast bit rate modification, a certain set of channelization codes is usually reserved for each DSCH as illustrated in Figure 1. This means that time delays due to release and setup of new codes can be avoided. However, this is done at the expense of potentially wasting part of the limited code resources when the PDSCH is using the higher spreading factors. It ~~were~~ was therefore of advantage when the reserved codes are adjusted adaptively according to traffic load in the cell, among others.--

At page 2, lines 8-24:

--Link Adaptation ~~Adaption~~ (LA) techniques are commonly used for control (i.e. bit rate selection) of the DSCH. LA aims at minimizing the transmit power variations of the PDSCHs by transmitting with lower bit rates to UEs (User Equipments) which are far from the BS (Base Station) compared to those close to the BS. The selected bit rate for each UE can be expressed as a function of the power allowed for the PDSCH and the associated DPCH ($P_{txPDSCHallowed}$ & P_{txDPCH}), the planned EbNo's for the channels (ρ_{PDSCH} & ρ_{DPCH}), and the bit rate of the associated DPCH (R_{DCH}) (DPCH = Dedicated Physical Channel). According to the LA criteria, the bit rate to be allocated a user is therefore expressed as

$$R_{DSCH,LA} = Round\left\{\frac{P_{txPDSCHallowed}\,\rho_{DPCH}}{P_{txDPCH}\,\rho_{PDSCH}} R_{DCH}\right\} \qquad (1)$$

where *Round{}* denotes truncation to the nearest possible bit rate. That can *e.g.* be 32 kbps, 64 kbps, etc., depending on the reserved channelization codes. Knowledge of P_{txDPCH} is obtained through average measurements. --

At page 4, lines 21-31:

The presented algorithm opens for effective utilization of the DSCH when using link adaptation techniques, as well as the HS-DSCH. Especially for cases where the BS ~~carriers~~ carries a mixture of RT (Real Time) and NRT (Non Real Time) users, which are mapped to different channel types, such as FACH (Forward Access Channel), DCH (Dedicated Channel), DSCH (Downlink Shared Channel), and HS-DSCH (High Speed Downlink Shared Channel). The algorithm optimizes the usage of both code and power resources. This will in general result in a capacity gain or improved quality in terms of lower queuing times for NRT user, less blocking/dropping, etc.

At page 5, lines 4-11

--The presented algorithm opens for effective utilization of the DSCH when using link adaptation techniques as well as the HS-DSCH. The invention discloses a method for

adaptive adjustment of root spreading factor and DSCH power. The adaptation is preferably based on three ~~kind~~ kinds of measurements:

1. The average transmitted power P_txDSCHest of the PDSCH,

2. The relative activity factor A of the PDSCH,

3. The weighted code blocking rate B. --

At page 6, lines 4-6:

--Fig. 4 illustrates further examples of the DSCH ~~behaviour~~ behavior before and after adjustment of the reserved Tx power level in an embodiment of the invention,

At page 9, lines 16-27:

-- The reason is that when the activity on the DSCH is too low to keep it almost constant busy, one option is to reduce the reserved power level, which automatically will result in smaller assigned bit rates and therefore also longer transmit times, i.e. a higher activity on the channel. This is obvious from equation (1). The threshold parameter TH_A which lies between 0 and 1 and X are strongly related. Assuming that the offered traffic is identical in two consecutive observation periods, it can be shown that setting TH_A=10^(-XdB/10) results in ~~fulfilment~~ fulfillment of equation (2) in the following observation period provided that $A \cong TH_A$ in the previous period.--

At page 10, lines 12-24:

--If B is greater than TH_B, and A is greater than TH_{A2} ($B > TH_B$ and $A > TH_{A2}$), then decrease SF_{min} (allowing higher bit rates): The reason herefore is that if it happens more than a certain fraction of the observation period ($TH_B \in [0;1]$), that higher bit rates than $R_{DSCHmax}$ are requested according to the LA criteria in equation (1) and the DSCH is constantly busy, then one should try to increase $R_{DSCHmax}$, i.e. decrease SF_{min} with a factor of two. However, one should only perform this action if A is close to unity. If $A \ll 1$, then it indicates that the DSCH is not constantly busy so a better solution to the problem is probably to lower the reserved power level, i.e. this would reduce the likelihood of code blocking events and help in ~~fulfilment~~ fulfillment of equation (2).--

At page 11, lines 8-15:

--The effect of the criteria for reducing the reserved power level is illustrated in FIG. 4. The ~~black~~ solid curves correspond to the high reserved power level, while the ~~blue~~ dashed curve corresponds to the reserved power level after the adjustment. The current example correspond to the case where A=0.5 and $P_{DSCHest}=0.5P_{DSCHreserved}$ prior to adjustment, and X=3 dB. For this particular case, as well as for other cases, the problem is obviously solved by reducing the power.--

At page 11, line 24- page 12, line 1:

--With regard to "territory method" for channelization code allocation: Once it has been decided to reserve a new root PDSCH code with a given SF, the next step is to decide where in the code tree this reservation is to be made. As an example, it is assumed that a code with SF=8 should be reserved. For that particular case there might actually be on the order of 1-6 ~~availavable~~ available nodes (codes) in the tree. If one just randomly selects a node in the tree, one eventually reaches a situation where the code-tree becomes highly ~~fracmented~~ fragmented and difficult to manage as new users are being admitted and dropped (due to ended calls).--

At page 13, lines 1-10:

--Additional DSCH capacity: When the default capacity is allocated to the DSCH territory, additional code resources might be needed if the DSCH is highly loaded. The upgrade to a lower SF is done by including part of the codes in the "additional DSCH territory" region, provided that free codes are available. Once the traffic load on the DSCH start to decline and ~~and~~ the criteria for increase of SFmin in the above sections relating to adaptive adjustment of root spreading factor and DSCH power is triggered, the additional DSCH territory is downgraded.--

Page 14, lines 18-29

Fig. 6 shows a schematic block diagram illustrating an embodiment of the present invention. A shared channel resource manager 1 (DSCH and/or HS-DSCH) receives several inputs for evaluating and ~~optimising~~ optimizing or improving channel resources and/or power. The shared channel resource manager 1 receives measurement results, i.e. data gained by periodical measurement of code tree load, e.g. code blocking (B) and code activity(A), as well as data gained by periodical measurement of average shared channel transmit power. Further, control parameters, preferably external algorithm control parameters (e.g. thresholds TH_{A1}, TH_{A2}, etc),, are supplied to the channel resource manager 1.--